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# STIC Search Report

### STIC Database Tracking Number: 183322

TO: Jean M Corrielus

Location:

Art Unit: 2172

Wednesday, September 29, 2004

Case Serial Number: 09697265

From: Terese Esterheld

Location: EIC 2100

PK2-4B30

Phone: 308-7795

Terese.esterheld@uspto.gov

### Search Notes

Dear Examiner Corrielus,

Attached, please find the results of your search request for application 09697265. I have concentrated on finding information on Detecting new drive that is not in the namespace.

Items have been marked that may be of value to you. Please look over the complete package as other items may also be of use.

Please let me know if you need additional information on this search.

Thank you for coming to EIC 2100.

Terese Esterheld



```
Description
Set
        Items
                NAMESPACE? OR NAME()SPACE?
         2324
S1
                DETECT? OR DETERMIN? OR RECOGNI? OR IDENTIF?
      1887805
S2
                NEW OR NEWER OR OTHER OR ANOTHER OR ADDITIONAL OR SUPPLEME-
S3
      6114617
                LINK? OR POINTER? OR ADDRESS? OR TAG OR TAGS OR FLAG? ? OR
      1610877
             INDICATOR? OR TOKEN?
                STORAGE OR DRIVE? OR MEMORY OR HARDDRIVE? OR DISK? OR NODE?
      1588280
S5
                (ORIGINAL OR SOURCE OR SPARSE OR EXISTING) () (VOLUME OR FILE
         8897
S6
              OR FILES OR DRIVE) OR SPARSEFILE?
                MULTIPLE OR MANY OR PLURAL OR NUMEROUS OR SEVERAL
      2947259
S7
                S1 (S) S2 (S) (S3 (2N) S5)
S8
            9
                S2 (S) (S3 (2N) S5) (S) S6
S9
           43
                S8 OR S9
           51
S10
                S4 (S) S6 (S) S5
          345
S11
                S4 (S) S7 (S) (S3 (2N) S5)
         2191
S12
                S1 OR S6
        11121
S13
          345
                S11 (S) S13
S14
           30
                S12 (S) S13
S15
                S14 (S) S15
S16
           24
                S10 OR S15 OR S16
S17
           61
                S17 NOT PY>2000
S18
           54
                S18 NOT PD>20001026
S19
           48
                RD (unique items)
S20
           44
      15:ABI/Inform(R) 1971-2004/Sep 29
File
         (c) 2004 ProQuest Info&Learning
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
             Computer Fulltext 1988-2004/Sep W3
File 647:CMP
          (c) 2004 CMP Media, LLC
File 275: Gale Group Computer DB(TM) 1983-2004/Sep 29
          (c) 2004 The Gale Group
File 674:Computer News Fulltext 1989-2004/Aug W4
          (c) 2004 IDG Communications
File 696:DIALOG Telecom. Newsletters 1995-2004/Sep 28
          (c) 2004 The Dialog Corp.
File 621:Gale Group New Prod. Annou. (R) 1985-2004/Sep 29
          (c) 2004 The Gale Group
```

20/3,K/1 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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01853448 05-04440

Darn the torpedoes

Hall, Jon

UNIX Review's Performance Computing v17n9 PP/ 62-64 Aug 1999

ISSN: 1098-7150 JRNL CODE: URPC

WORD COUNT: 1617

...TEXT: means, and why Linux fell short of the mark.

To run a system continuously, you have to **detect** failing hardware by looking at the error-message file and seeing soft hits increasing. Using disk drives...

... failing disk read-only, block additional writes to the disk, and start to write the data to another drive, while copying the failing disk blocks to a new drive as well. When the old disk is empty of any data files, you should be able to remove it from the file system, bring that disk offline, replace it with another disk, bring that disk online, bring it into the existing file system where the old disk was attached, and have the disk take its place along with all the other disks in that file system. The file systems should be able to handle reasonably sized disks and disk...

20/3,K/2 (Item 2 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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01824117 04-75108

Raid again

Yager, Tom

UNIX Review's Performance Computing v17n5 PP: 24-27 May 1999

ISSN: 1098-7150 JRNL CODE: URPC

WORD COUNT: 2669

...TEXT: it. Ridiculously overpriced storage systems still abound, with vendors milking every dollar they can from their name **recognition**. And Microsoft, not to be outdone, has been crowing about Windows 2000's ability to increase the...

...without bringing the system down. Is this a breakthrough? Nope. It turns out you can add a **new drive** to the end of an **existing drive**, or to an already concatenated volume. You can't add a drive to a stripe set, so ...

20/3,K/3 (Item 3 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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01677251 03-28241

Preparing Web data with XML: Part III

Willner, Eki

Information Today v15n7 PP: 39, 42 Jul/Aug 1998

ISSN: 8755-6286 JRNL CODE: IFT

WORD COUNT: 1724

...TEXT: searches manageable. No longer will you do a Web search on "disk," hoping for information on that **new drive** upgrade you read about, and end up with 20 million hits, most of them irrelevant. How will...

... It's all a matter of tagging. Remember that XML allows you to field data, not just identify its format, and that universal name spaces

powered off before a **drive** or **other** component could be replaced. Warm swap designs require halting all activity involving the failed component, but the...

...is still running. Electrical glitches leading to system hang-ups and data corruption are avoided. Hot spare drives sound the same as hot swaps, but are not. If any drive on a RAID system falls, the information it contains must be rebuilt quickly on the replacement drive, usually via the parity systems built into RAID Levels 01, 3 and 5. The system isn...

...for it to be fully implemented. In the wings A RAID supporting hot spare or hot standby drives has one or more drives installed and ready to go in case an original drive fails. The data rebuilding begins immediately, reducing the amount of lost time. With one exception, all listed RAID systems use Fast Wide SCSI-2, Ultra SCSI-3 or Fibre Channel connection technologies. IBM Storage System's 7133 Serial Disk System uses IBM's SSA connection design. Fast Wide SCSI-2 offers 16-bit data paths and...offers great flexibility for advanced RAID designs because it can be used both by networks and mass storage systems such as RAID. Nearly half the listed systems use Fibre Channel interfaces, at least as high...

...and Simple Network Management Protocol software that comes with your RAID subsystem. \* Remember that the smallest capacity **drive** in each subsystem becomes the default size of the entire set. \* Know that RAID levels have no...

20/3,K/19 (Item 8 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2004 The Gale Group. All rts. reserv.

01753590 SUPPLIER NUMBER: 16691897 (USE FORMAT 7 OR 9 FOR FULL TEXT) ENTERPRISE SYSTEMS MANAGEMENT OFFERS UNAME-IT SOFTWARE FOR NAMING SERVICE MANAGEMENT.

Computergram International, pCGN02240017

Feb 24, 1995

ISSN: 0268-716X LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 184 LINE COUNT: 00014

#### TEXT:

...software on Sparc-based systems for enabling groups of systems administrators to manage an organisation's shared name space collectively. Uname-It stores name space information in a central database, access to which is controlled from a systems administration server. The idea is to provide support for multiple existing name services such as Network Information ServerNIS, NIS+ or DNS, from a single naming model so...

...are not impeded by naming service incompatibilities. In client-server set-ups where information about names and addresses must be kept up-to-date, changes and additions are usually made manually. The company says Uname-It ensures that changes to name space are correct and consistent. The graphical front-end includes a configurable system enabling for example, a subset...

...site licence and graphical and programming clients is \$24,000, rising to \$66,000 for 2,000 nodes. Other implementation are promised.

20/3,K/20 (Item 9 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01697677 SUPPLIER NUMBER: 16197462 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Investigating the hybrid windowing and messaging architecture of Chicago.
(Microsoft's Chicago operating system) (Technical)
Pietrek, Matt

Microsoft Systems Journal, v9, n9, p15(14)

Sept, 1994

DOCUMENT TYPE: Technical ISSN: 0889-9932 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 12182 LINE COUNT: 00926

... obtains a file-mapping handle by calling CreateFileMapping or OpenFileMapping. OpenFileMapping retrieves a handle to an already **existing file** -mapping object. CreateFileMapping creates a new mapping object and requires a valid file handle to the file...

...to needing a valid file handle is when a program uses 0xFFFFFFFF as the handle value. Chicago **recognizes** this special value and doesn't associate the range of memory addresses with a file. (Actually, it...

...effectively think of the memory as not being connected to a file.) Processes that want to share **memory** with each **other** can use the method of passing <code>OxFFFFFFFFF</code> as a file handle to <code>CreateFileMapping</code> to <code>createportholes</code> of...

20/3,K/21 (Item 10 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01675374 SUPPLIER NUMBER: 15306816 (USE FORMAT 7 OR 9 FOR FULL TEXT)

ImagePals 2, image mgt for Windows.

McKenna, Patrick

Newsbytes, NEW04110019

April 11, 1994

LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 323 LINE COUNT: 00025

According to the company, source files can reside on a network, compact disc (CD), Photo CD, hard disk or other media. ImagePals, meanwhile, can import from scanners, digital cameras, video grabbers, and Photo CDs. A built-in viewer allows previewing located files by identifying thumbnails that mark the files.

According to Ulead, ImagePals competes with Shoebox and Kudo ImageBrowser at a...

20/3,K/22 (Item 11 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01669264 SUPPLIER NUMBER: 150 2208 (USE FORMAT 7 OR 9 FOR FULL TEXT) StratosWare creates portable version of memory checker. (MemCheck for ANSI

I∕SSN: 1059-2407

LANGUAGE:

and K&R) (New Products) (Brief Article) (Product Announcement)

Windows-DOS Developer's Journal, v5, n2, p79/(1)

Feb, 1994

DOCUMENT TYPE: Product Announcement

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 215 LINE COUNT: 00017

TEXT:

StratosWare Corporation has created an ANSI-compliant source code version of MemCheck, its automatic error detection tool for C programmers. MemCheck was formerly available only on DOS, Windows, and the Macintosh, but can now be used in any ANSI or KP&R-compliant environment. MemCheck for ANSI and K&R detects memory overwrites and underwrites, memory leaks, heap corruption, out-of-memory conditions, and other memory errors. The package works at runtime to identify errors by source file and line number. You can direct error messages to the screen, write them to log files, or...

'20/3,K/23 (Item 12 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01643357 SUPPLIER NUMBER: 14809739 \*

DoubleSpace remedy. (Software Review) (MS-DOS 6.2) (First Impressions) (Evaluation)

Powell, James E.

Windows Magazine, v5, n1, p142(1)

Jan, 1994

DOCUMENT TYPE: Evaluation ISSN: 1060-1066 LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

...ABSTRACT: the DoubleSpace compression utility and SmartDrive disk caching program included in the DOS 6.0 upgrade. A **new** DoubleGuard **memory** protection program helps ensure that no other programs try to access the memory areas that DoubleSpace uses...

...utility performs a disk surface scan and is recommended when preparing a hard drive for compression; it **detects** problems and fixes them by moving data away from bad sectors and marking the sectors so that...

...display of large numbers and a COPY command that asks if the user wants to replace an  $\ensuremath{\mathsf{existing}}$   $\ensuremath{\mathsf{file}}$  .

20/3,K/24 (Item 13 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01633564 SUPPLIER NUMBER: 13703519 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Your System 7 guide to 30 ways to work faster and smarter with your
Macintosh. (includes related articles on deciding between System 7 and
Windows, Apple's future operating system development, moving to System 7,
and upgrading to System 7.1) (An Apple Advertising Supplement)
MacUser, v9, n5, p17(13)

May, 1993

ISSN: 0884-0997 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT WORD COUNT: 7447 LINE COUNT: 00554

... three levels deep in your Applications folder.

Using the Make Alias command (File menu), you can create several aliases for the same file and put them in different places—on the desktop, in the Apple menu, in different folders, even on another disk. Each alias serves as a pointer to the original file, wherever it resides. And because an alias duplicates the file's icon, not its contents, it takes up just 1 to 2K of disk space.

Aliases give you the best of both worlds: organized files and instant access to the items...

20/3,K/25 (Item 14 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01586947 SUPPLIER NUMBER: 13475906 (USE FORMAT 7 OR 9 FOR FULL TEXT)
StratosWare releases MemCheck for the Macintosh. (StratosWare Corp.'s error detection and prevention software package) (New Products) (Brief Article)
(Product Announcement)

C Users Journal, v11, n3, p118(1)

March, 1993

DOCUMENT TYPE: Product Announcement

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 162 LINE COUNT: 000/13

IS**S**N: 0898-9788

LANGUAGE:

TEXT:

StratosWare has introduced versions of its error detection and

every file saved during the backup in the file BACKUP.LOG in the root directory of the source drive often there's enough room on the last disk of the transfer to hold a copy of...

...the log file is a good idea, perhaps even critical, because there's no other way to determine the contents/of transfer disks RESTOREing them.

With this method, files should take less space on the transfer disks

than they...

20/3,K/31 (Item 20 from file: 275) DIALOG(R) File 275: Gale Group Computer DB(TM) (c) 2004 The Gale Group. All rts. reserv.

SUPPLIER NUMBER: 07758370 (USE FORMAT 7 OR 9 FOR FULL TEXT) Quattro Pro: taking on Lotus 1-2-3. (spreadsheet software from Borland International Inc.) (Software Review) (Product Review) (evaluation)

Rivera, Christine

MIS Week, v10, n40, p20(1)

Oct 9, 1989

DOCUMENT TYPE: evaluation

ISSN: 0199-8838

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 791 LINE COUNT: 00059

a window to full size, then reduce it again to view the tiled windows.

Quattro Pro's linking is more flexible than is the Lotus version 2.2, which allows only linking once cell on disk to another cell in memory . Not only can a Quattro formula reference cells from multiple worksheets, but when you copy formulas, linked addresses are adjusted to reflect their relative positions in the source files . Updating is also easier because you can change or delete links and even automatically load all linked files.

Quattro Pro also has the upper hand when it come to memory . . management. With its VROOMM...

(Item 21 from file: 275) DIALOG(R) File 275: Gale Group Computer DB (TM) (c) 2004 The Gale Group. All\rts. resetv.

SUPPLIER NUMBER: \07422\342 (USE FORMAT 7 OR 9 FOR FULL TEXT) 01305869 Running CHKDSK: the right way to give your hard disk a clean bill of health - logical health, that is. (check-disk program)

DeVoney, Chris

PC-Computing, v2, n8, p231(1)

August, 1989

ISSN: 0899-1847

LANGUAGE: / ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 824 LINE COUNT: 0,0059

the disk. CHKDSK wil! report the names of such "cross-linked" files; you should copy them to another disk and delete the original files . Now inspect the coples with a text editor or the program that originally created them and try to determine which one has the errant. data. If they're not text files, this can be difficult. Sometimes...

(Item 22 from file: 275) DIALOG(R) File 275: Gale Group Computer DB(TM) (c) 2004 The Gale Group. All rts. reserv.

SUPPLIER NUMBER: 07258458 (USE FORMAT 7 OR 9 FOR FULL TEXT) WORM drives: optical storage made permanent. (write once read many times) Stevens, Larry

MacWEEK, v3, n18, p28(1)

May 2, 1989

ISSN: 0892-8118 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 962 LINE COUNT: 00072

ABSTRACT: Extremely large hard disks of 150Mbytes and more are becoming increasingly prevalent among Macintosh users, but even these 'drives fall short for users who need to archive vast amounts of data. 3-D graphics and sound, for example, can make even a 150Mbyte hard disk seem small. In response, users are turning to WORM (write-once-read-many) drives, which vary in capacity from 600Mbytes to 3.2Gbytes. WORM disks are ideal for permanent storage, with some studies indicating shelf lives of up to 30 years. WORM disks are not erasable, but several value-added resellers market software that makes the disks appear to be erasable. The software does not alter the original file and pointers are always provided that allow the original file to be found. The major problem with WORM drives is media incompatibility - most drives cannot read or write to other vendors' disks.

20/3,K/34 (Item 23 from file: 275)
DIALOG(R)File\_275:Gale Group Computer DB(TM)
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01252610 SUPPLIER NUMBER: 06757177 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Tech Releases. (new products) (product announcement)

PC Tech Journal, v6, n7, p34(6)

July, 1988

DOCUMENT TYPE: product\announcement / ISSN: 0738-0194

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 4415 LINE COUNT: /00354

... QNX communications protocol, implements a highly secure, error-free communications protocol for transferring files over a serial **link** between QNX systems. QCP provides the error-checked file-transfer protocol needed by Qterm or QCL to transmit or receive files. QTERM, \$150; 4- and 16- node network versions, \$300 and \$600, respectively. Quantum Software Systems Ltd., 175 Terrence Matthews Crescent, Kanata, Ontario, Canada...

...to separate code from data at a rate of 10,000 lines per minute on a hard disk. Other features include processing for the 80386/87 instruction set, creation of MASM-ready output, automatic generation programming language is offered by Digital Inc. Smalltalk/V 286 runs in protected mode and can address as much as 16MB directly. Smalltalk/V 286 is designed to operate with both DOS and OS...

...with more than 32,000 objects, and objects can be larger than 64KB due to the expanded memory capacity. \$199.95; upgrade from previous versions, \$75.00. Digitalk Inc. 9841 Airport Blvd., Los Angeles, CA...

...adapter boards, 20 printers, and 11 scanners, bringing the total number of supported devices to 144. A disk -based virtual raster interface for EMS, as well as system memory, has been added. Extended character-set support enables software developers to address IBM's full 255 characters in graphics and to design foreign-language fonts. \$325; update, \$150. Media

...Technologies Inc. As a compiled language, OPS83 offers small application program code size. The OPS83 runtime system, linked to an application program, requires only 50KB of memory on the PC. OPS83 is written in C for easy interfacing to programs written in other languages...

...Version Control System 2.0 (PVCS), a configuration and management system that stores the revision history of **source files** and maintains chronological records of changes. PVCS 2.0 can reconstruct any prior revision of a module, define a version as specified revisions of various modules, and support **multiple** lines of development from a common ancestor. **Disk** space is conserved because only the differences between

```
Items
               Description
Set
S1
        1757
               NAMESPACE? OR NAME()SPACE?
               DETECT? OR DETERMIN? OR RECOGNI? OR IDENTIF?
      2962628
S2
               (NEW OR NEWER OR OTHER OR ANOTHER) (2N) (STORAGE OR DRIVE? OR
s3
      137134
             MEMORY OR HARDDRIVE? OR DISK? OR NODE?)
              LINK? OR POINTER? OR ADDRESS? OR TAG OR TAGS OR FLAG? ? OR
S4
            INDICATOR? OR TOKEN?
               STORAGE OR DRIVE? OR MEMORY OR HARDDRIVE? OR DISK? OR NODE?
S5
      2184058
                (ORIGINAL OR SOURCE OR SPARSE OR EXISTING) () (VOLUME OR FILE
S6
         4968
             OR FILES OR DRIVE) OR SPARSEFILE?
              MULTIPLE OR MANY OR PLURAL OR NUMEROUS OR SEVERAL
S7
      4676373
               S1 (S) S2 (S) S3
S8
           2
           29
               S2 (S) S3 (S) S6
S9
               S8 OR S9
S10
          30
               S4 (S) S6 (S) S5
          109
S11
          35
               S11 (S) S7
S12
S13
           9
                S11 (S) S10
               S8 OR S9 OR S10 OR S12 OR S13
S14
          56
               S14 NOT PY>2000
S15
          48
S16
          47
               S15 NOT PD>20001026
S17
          35 RD (unique items)
File 636: Gale Group Newsletter DB(TM) 1987-2004/Sep 29
         (c) 2004 The Gale Group
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 613:PR Newswire 1999-2004/Sep 29
         (c) 2004 PR Newswire Association Inc
File 16:Gale Group PROMT(R) 1990-2004/Sep 29
         (c) 2004 The Gale Group
File 160: Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 553: Wilson Bus. Abs. FullText 1982-2004/Aug
         (c) 2004 The HW Wilson Co
```

Users get 10MB of free space on FreeBack.com but could store up to 50MB of data...

17/3,K/24 (Item 10 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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05754723 Supplier Number: 50238707 (USE FORMAT 7 FOR FULLTEXT)

ArcSoft Announces PhotoBase 2.0.

Business Wire, p08121320

August 12, 1998

Language: English Record Type: Fulltext

Article Type: Article

Document Type: Newswire; Trade

Word Count: 720

... compatible with popular word processing, desktop publishing, database and spreadsheet applications.

Quick and Easy Management Tools

Easily identify graphic files with PhotoBase's thumbnail images. Create albums of images, audio, video, HTML and document (doc...

...s one-step commands, users can quickly copy or move entire albums on the computer's hard **drive** or to **other** removable media without losing the links to the **original files**.

Image Editor

PhotoBase includes an image editor for cropping, rotating, sharpening, and color adjustments. Sound files can...

17/3,K/25 (Item 11 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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05746708 Supplier Number: 50229690 (USE FORMAT 7 FOR FULLTEXT)

PageKeeper Standard 3.0

Computer Shopper, v18, n9, p290

Sept, 1998

Language: English Record Type: Fulltext

Article Type: Article

Document Type: Magazine/Journal; General Trade

Word Count: 471

Like many document managers these days, PageKeeper's desktop resembles a souped-up version of Windows Explorer: In addition...

...and drop files from Windows Explorer directly onto the PageKeeper desktop. Another nice touch: PageKeeper conserves hard drive space by creating a pointer to the original file's location instead of copying it into a PageKeeper directory. And like Pagis Pro 2.0, PageKeeper...

17/3,K/26 (Item 12 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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05610944 Supplier Number: 48489624 (USE FORMAT 7 FOR FULLTEXT)

Moving Forward Safely Means Backing Up Carefully

Newman, Jeff

Network Computing, p176

May 18, 1998

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 2205

data remains compressed is up to the administrator. Note that many

tape technologies incorporate data compression algorithms.

Many backup packages offer HSM. HSM allows older data or data that isn't expected to be accessed for some time to be temporarily migrated to a secondary tape storage (or more often to an intermediate mass storage medium, such as magneto optical technology, which is a bit faster). A small index file, called a "stub," is used in the place of the original file, and serves as a pointer to that file should a user or application need access to it. When a particular file is requested, it's moved from the intermediate or secondary storage back to the primary storage for access. The whole operation is transparent to the user, aside from the delay experienced while the file is migrated back to the server's primary storage. Because of the stub indexes, the files and directories appear to be on the server's primary storage.

Many HSM solutions let administrators perform clever housekeeping by

allowing them to place rules on the migration...

17/3,K/33 (Item 2 from file: 160)
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01770043

POLARIS SOFTWARE'S NEW ZOO KEEPER FINDS THE RIGHT HARD DISK FILE FAST News Release August 10, 1987 p. 1

... compatible users spend their time using their computers instead of wasting it searching for files in their disk directories. Users of hard disks know the aggravation of trying to retrieve a file when they don't recall its exact name...

... Keeper eliminates the need to sort directories by solving the real problem: finding the right file fast. Tags the File. Everytime a new file is created, in application, Zoo Keeper automatically pops and to ask the user to tag it with up to three key words, plus as many as forty characters of description. Existing files can also be tagged. Each key tag is made up to one to twenty characters of words chosen by the user to relate to the file. There is no-prefined structure to follow. Tags are fast and easy to create from within the application. It is necessary for Zoo Keeper users to exit and re-enter their primary programs because Zoo Keeper is ram-resident. Once the tag is complete, users will be returned instantly to the correct spot in their application. Finds the File...
... and Zoo Keeper will list the name and description of every file, in any subdirectory, on any disk, that meets the key parameters. Zoo Keeper will perform its search even with partial keys. The first...

... the space provided. (ALT)(D), for example, can be used to assign the word "Document" in a tag, saving typing time.

Full text available on PTS New Product Announcements.

. . .

	Set	Items	Description				
	S1	52					
	S2	9180	DETECT? OR DETERMIN? OR RECOGNI? OR IDENTIF?				
	S3	34251	NEW OR NEWER OR OTHER OR ANOTHER OR ADDITIONAL OR SUPPLEME-				
		PARY					
	S4	10914	LINK? OR POINTER? OR ADDRESS? OR TAG OR TAGS OR FLAG? ? OR				
		1I	NDICATOR? OR TOKEN?				
	S5	8310	STORAGE OR DRIVE? OR MEMORY OR HARDDRIVE? OR DISK? OR NODE?				
	S6		(ORIGINAL OR SOURCE OR SPARSE OR EXISTING) () (VOLUME OR FILE				
		. (	OR FILES OR DRIVE) OR SPARSEFILE?				
	s7	22736	MULTIPLE OR MANY OR PLURAL OR NUMEROUS OR SEVERAL				
	S8	0	S2 AND (S3 (2N) S5) AND S1				
	S9	1	S2 AND (S3 (2N) S5) AND S6				
	S10	11	S4 AND S6 AND S5				
	S11	0	S10 AND S1				
	S12	4	S10 AND S2				
	S13	0	S1 AND S2 AND S4 AND S5 AND S6				
	S14	153					
	S15	5	S14 AND S2 AND S4 AND S5				
	S16	12	S9 OR S10 OR S12 OR S15				
	S17	9	S16 NOT PY>2000				
-	.S18		S17 NOT PD>20001026				
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Items
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            INDICATOR? OR TOKEN?
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S9
               S8 OR S9
S10
            6
         102 S4 AND S6 AND S5
S11
         1251 S4 AND S7 AND (S3 (2N) S5)
S12
         2919 S1 OR S6
S13
         34 S13 AND S2 AND S4 AND S5
S14
          10 S4 AND S6 AND (S3 (3N) S5)
S15
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File
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      35:Dissertation Abs Online 1861-2004/Aug
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File 202:Info. Sci. & Tech. Abs. 1966-2004/Sep 09
         (c) 2004 EBSCO Publishing
File 65:Inside Conferences 1993-2004/Sep W4
         (c) 2004 BLDSC all rts. reserv.
       2:INSPEC 1969-2004/Sep W3
File
         (c) 2004 Institution of Electrical Engineers
File 233:Internet & Personal Comp. Abs. 1981-2003/Sep
         (c) 2003 EBSCO Pub.
File 94:JICST-EPlus 1985-2004/Aug W5
         (c) 2004 Japan Science and Tech Corp(JST)
File 99: Wilson Appl. Sci & Tech Abs 1983-2004/Aug
         (c) 2004 The HW Wilson Co.
File 95:TEME-Technology & Management 1989-2004/Jun W1
         (c) 2004 FIZ TECHNIK
File 583: Gale Group Globalbase (TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
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i9/5/5 (Item 5 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

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02098492 E.I. Monthly No: EIM8606-040354

Title: FILE SYSTEM OF AN INTEGRATED LOCAL NETWORK.

Author: Leach, Paul J.; Levine, Paul H.; Hamilton, James A.; Stumpf, Bernard L.

Corporate Source: Apollo Computer Inc, Chelmsford, MA, USA

Conference Title: 1985 ACM Thirteenth Annual Computer Science Conference.

Conference Location: New Orleans, LA, USA Conference Date: 19850312

Sponsor: ACM, New York, NY, USA

E.I. Conference No.: 07113

Source: Publ by ACM, New York, NY, USA p 309-324

Publication Year: 1985 ISBN: 0-89791-150-4 Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8606

Abstract: The distributed file system component of the DOMAIN system is described. The DOMAIN system is an architecture for networks of personal workstations and servers which creates an integrated distributed computing environment. The distinctive features of the file system include: objects addressed by unique identifiers (UIDs); transparent access to objects, regardless of their location in the network; the abstraction of a single level store for accessing all objects; and the layering of a network wide hierarchical name space on top of the UID based flat name space. The design of the facilities is described, with emphasis on techniques used to achieve performance for access to objects over the network. (Author abstract) 33 refs.

Descriptors: COMPUTER NETWORKS--\*Local Networks; COMPUTER SYSTEMS, DIGITAL--Distributed; COMPUTER OPERATING SYSTEMS-- Storage Allocation Identifiers: INTEGRATED LOCAL AREA NETWORKS; DISTRIBUTED FILE SYSTEMS; APPLLO DOMAIN OPERATING SYSTEM

Classification Codes:

723 (Computer Software); 718 (Telephone & Line Communications); 722 (Computer Hardware)

72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

#### 19/5/8 (Item 3 from file: 35)

DIALOG(R) File 35: Dissertation Abs Online

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01663603 ORDER NO: AAD99-03655

MASKING MEMORY ACCESS LATENCY WITH A COMPILER-ASSISTED DATA PREFETCH CONTROLLER (CACHE)

Author: VANDERWIEL, STEVEN PAUL

Degree: PH.D. Year: 1998

Corporate Source/Institution: UNIVERSITY OF MINNESOTA (0130)

Adviser: DAVID J. LILJA

Source: VOLUME 59/08-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 4355. 79 PAGES

Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL; COMPUTER SCIENCE Descriptor Codes: 0544; 0984

Scientific and other data-intensive applications often generate memory referencing patterns that exhibit little data reuse, resulting in poor cache utilization and run-times that can be dominated by memory delays. Data prefetching attempts to mask these delays by fetching data into the processor cache hierarchy in advance of the data's actual use. In this thesis, a data prefetch controller (DPC) is proposed that combines the low instruction overhead of hardware prefetching techniques with the accuracy of software prefetching.

The DPC issues prefetch requests on behalf of the processor by executing an independent program that is derived from analysis of the

application source code. This compile-time information allows the DPC to replicate portions of the processor's data referencing pattern at run-time. The prefetch controller anticipates upcoming processor data references through a combination of explicit processor commands and address bus snooping hardware that detects when previously prefetched data have been referenced by the processor.

The efficacy of the prefetch controller in reducing program run-times is established through software simulation of the DPC, processor and memory hierarchy. These simulations are driven by executable files produced by a commercial compiler. The source files for both the processor program and the DPC program are generated from the original application source code by a custom source-to-source transformer. Simulation results show that the DPC improved the execution times of a subset of the SPECfp95 benchmark suite by 41% to 64%. Comparative analysis shows the prefetch controller also tends to have higher prefetch accuracy and coverage than pure hardware or software techniques.

19/5/11 (Item 6 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
(c) 2004 ProQuest Info&Learning. All rts. reserv.

01514704 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L. AN INVESTIGATION OF THE EFFECTIVENESS OF OPEN HYPERTEXT TECHNIQUES FOR QUALITATIVE DECISION SUPPORT ( LINKFACILITY )

Author: FRITZ, JANE MANNING

Degree: D.PHIL. Year: 1995

Corporate Source/Institution: UNIVERSITY OF YORK (UNITED KINGDOM) (0769)

Source: VOLUME 57/04-C OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1343. 289 PAGES

Descriptors: COMPUTER SCIENCE; INFORMATION SCIENCE

Descriptor Codes: 0984; 0723

Current computer-based tools to aid decision making processes are directed at analytical, convergent techniques. These tools concentrate on the Choice phase of decision making. Furthermore, the information analyzed in pursuit of decision making resides in quantified form in databases; the increasing volume of qualitative information residing on end-users' computer systems is excluded from the processes. This thesis introduces generic open hypertext as a solution to bringing qualitative information, non-analytical end-users, and the divergent activities of the Intelligence and Design phases into the realm of computer-supported decision making. The design of an open hypertext system, LinkFacility, is described, which incorporates all standard hypertext functions. Its uniqueness lies in its provision for end-users to author their own link structures graphically. Any file segment of any file type may participate as a node . Interrelationships among disparate file types can be superimposed on end-users' existing file systems; as a consequence, the end-users' information space may be browsed by navigation through query and link structures. A LinkFacility prototype has been implemented for the Microsoft Windows 3.1 environment.

This prototype has been used to evaluate the effectiveness of open hypertext techniques to provide improved support for non-analytical tasks which promote better informed decision making. Naturalistic experiments have been carried out with end-users, with short term results indicating immediate recognition of the usefulness of user-defined graphical link structures. Quasi-naturalistic experiments with end-user-type subjects have shown similar results, with the additional observations that LinkFacility's search-by-attribute-query is more efficient than existing methods and that novice users may benefit especially from this method. Controlled experiments showed that searching and browsing tasks were significantly improved using LinkFacility structures, independent of subject satisfaction. The benefit of the techniques for novice users was confirmed. A longitudinal study is recommended to investigate the contexts in which these techniques would be found most useful.

19/5/13 (Item 8 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
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754869 ORDER NO: AAD81-18424

AN ASSOCIATIVE BACKEND MACHINE FOR DATA BASE MANAGEMENT

Author: HURSON, ALIREZA

Degree: PH.D. Year: 1980

Corporate Source/Institution: UNIVERSITY OF CENTRAL FLORIDA (0705) Source: VOLUME 42/03-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1084. 393 PAGES

Descriptors: COMPUTER SCIENCE

Descriptor Codes: 0984

It has long been recognized that computer systems containing large data bases expend an inordinate amount of time managing the resources (viz. central processing time, memory,...etc.) rather than performing useful computation in response to user's query. This is due to the adaptation of the classical machine architecture, the so-called von Neumann architecture, to a problem domain that needs radically different machine architecture for an efficient solution. The characteristics that distinguish the computation for data base management systems are: massive amount of data, simple repetitive non-numeric operations and the association of a name space with the information space at a high level. The current systems meet these requirements by memory management techniques, specially designed application programs and a sophisticated address mapping methods. This accounts for a large software overhead and the resulting semantic gap between the high level language and the underlying machine architecture.

To overcome the difficulties of the von Neumann machines, Slotnick suggested the idea of the hardware backend processing by distributing the processing capabilities outside of CPU and among the read/write cells. These cells act as filters which improve the system performance by reducing the processing load on the CPU as well as the amount of data transported back and forth between secondary and main **storage**. The major contribution of this dissertation is the definition of a backend machine architecture ASLM (Associative Search Language Machine) and the development of a query language ASL (Associative Search Language) which is directly executed by the backend machine using built-in hardware algorithms for query processing and associative hardware for **name** - **space** resolution.

The language ASL is a high level data base language using associative principles for basic operations. The language has been defined based on the relational data model. ASL is relationally complete, and provides complete data independence. ASL provides facilities for query, insertion, deletion and update operations on tuples of variable sizes. Moreover, the structure of the statements in ASL are represented in arithmetic expressions like entities called set expressions.

ASLM is designed based on cellular organization, a design similar to Slotnick's idea with an important exception. In the design of ASLM, the processing units (cells) are moved into the backend machine. The general strategy in ASLM is based on the pre-search through the data file and then the execution of the operations on the explicit subfiles which are stored in the associative memory. The generation of the subrelations explicitly eliminates the existence of so-called mark bits in some of the previously designed data base machines. Moreover, it provides fast algorithms for interrelational operations such as "join." ASLM is also microprogrammable which gives more flexibility to the system.

The design of the ASLM differs from the majority of the data base machines based on Slotnick's idea: first, the separation of the cells from the secondary storage will result in a cost effective system in comparison to the other machines. This also eliminates any restriction on the secondary devices. Second, since cells are independent of each other there is no need for interconnection network between the cells. Third, ASLM is implemented by associative memory, the closeness between associative operations and data base operations reduces the existing semantic gap found in the conventional system, and fourth, ASLM is expandable to the MIMD

19/5/15 (Item 1 from file: 202) DIALOG(R) File 202: Info. Sci. & Tech. Abs. (c) 2004 EBSCO Publishing. All rts. reserv.

3201098

Method of cataloging removable media on a computer. Author(s): Bates, R D; Bridgman, J.; Ketterer, S.R.

Patent Number(s): US 5613097 Publication Date: Mar 18, 1997

Language: English Document Type: Patent Record Type: Abstract Journal Announcement: 3200

A method of automatic and user intuitive cataloging of removable media on a computer. The method does not require that user to launch an application to catalog because it operates within the existing system software and does not require a user to learn to operate a separate cataloging program. This applies to cataloging, as well as searching entries. The method presents the data in the catalog in the same way that actual files on the computers hard disk or start up volume are presented. The method includes modifying and/or creating pointer files so that when activated it can remember where the original file is located, even when the file is on a volume that is not accessible to the computer when the pointer file is activated. The pointer file created by this method can be resolved when accessed through the operating system interface or from within an application, just like actual files.

Descriptors: Automation; Cataloging; Computers; Media Classification Codes and Description: 4.07 (Classification, Indexing, and Thesauri); 5.06 (Software and Programming); 6.04 (Audio-Visual and Non-Print Media)

Main Heading: Information Recognition and Description; Information Processing and Control; Information Systems and Applications

(Item 1 from file: 233) DIALOG(R) File 233: Internet & Personal Comp. Abs. (c) 2003 EBSCO Pub. All rts. reserv.

00600173 00WJ04-001

The shell namespace PIDLs

Solomonovich, Oz

Windows Developer's Journal , April 1, 2000 , v11 n4 p8-18, 6 Page(s)

ISSN: 1083-9887 Languages: English

Document Type: Articles, News & Columns

Geographic Location: United States

Describes pointers to item identifier lists (PIDLs), which are used to access such namespace features as file context menus and drag-and-drop and presents a class to handle all details of using PIDLs. Examines the structure of an IDL, which is a concatenation of identifiers in the shell , noting that each IDL item includes a byte count and a data namespace section which is an arbitrary binary structure that has meaning only for the item's folder object. Explains that one must dynamically allocate and free memory of the proper size for IDLs, using the shell allocator, which makes the IDL memory accessible to both one's application and the shell. Focuses on the IDL's wrapper class, which makes it easier to work with variable-sized structures like IDLs, and also takes care of the details of working with the shell allocator. Includes two program listings, two code fragments, and two diagrams. (jon)

Descriptors: Programming Aids; Utility Program; Data Structures;

Memory

1/5/1 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

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07301232 \*\*Image available\*\*

METHOD AND SYSTEM FOR TRANSPARENTLY EXPANDING NONVOLATILE STORAGE

PUB. NO.: 2002-169712 [JP 2002169712 A]

PUBLISHED: June 14, 2002 (20020614)

INVENTOR(s): GOLDS DAVID P

APPLICANT(s): MICROSOFT CORP

APPL. NO.: 2001-329738 [JP 2001329738] FILED: October 26, 2001 (20011026)

PRIORITY: 00 697265 [US 2000697265], US (United States of America),

October 26, 2000 (20001026)

INTL CLASS: G06F-012/00; G06F-003/06

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a system and a method for transparently expanding a nonvolatile storage on a computer system through a link connecting one drive to one or more other drives.

SOLUTION: When a user adds a new disk drive, the drive is formatted, but not mounted where the user can see it. The data of a selected file are automatically migrated from its original drive to a new supplementary drive or generated directly on the new supplementary drive and the link is placed on the original volume so as to let the system know that the data are placed actually in another place. In one embodiment, that is carried out through an NTFS reparse point on an NTFS link made in the form of a sparsefile, so that disk space on the original drive can be reused.

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1/5/2 (Item 1 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

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01746506

Managed file system filter model and architecture Filterungsmodell und -architektur fur Dateiverwaltungssystem Architecture et modele de filtre pour systeme de gestion de fichiers PATENT ASSIGNEE:

MICROSOFT CORPORATION, (749866), One Microsoft Way, Redmond, WA 98052, (US), (Applicant designated States: all)

INVENTOR:

Pudipeddi, Ravisankar, 2829 234th Place NE, Sammamish Washington 98074,

Brown, Eileen C., 5732 29th Avenue NE, Seattle Washington 98105, (US) Christiansen, Neal, 1266 Bellevue Way NE 5, Bellevue Washington 98004, (US)

Thind, Ravinder, 13235 120th Avenue NE, Kirkland Washington 98034, (US) Dewey, Brian K., 5732 29th Avenue NE, Seattle Washington 98105, (US) Golds, David P., 15802 NE 49th Street, Redmond Washington 98052, (US)

Zbikowski, Mark J., 15817 NE 178th Place, Woodinville Washington 98072, (US

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721), Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1429247 A2 040616 (Basic)

APPLICATION (CC, No, Date): EP 2003028234 031209;

PRIORITY (CC, No, Date): US 315384 021209

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: G06F-009/46; G06F-017/30

#### ABSTRACT EP 1429247 A2

A model in which filter drivers are managed to receive callbacks for I/O requests in which the filter drivers have registered an interest. Per-volume instances of filter drivers register with a filter manager for pre-callbacks (for I/O to the file system) and post-callbacks (for I/O from the file system), and identify which I/O requests (e.g., create, read, write) they are registering to receive callbacks. The filter manager orders the instances for callbacks. When an I/O request is received, the filter manager converts the I/O request to callback data and calls the interested filters in the callback order, whereby the filter instances can process the I/O data. As the request returns from the file system, filters desiring post callbacks are called in the reverse order. Efficient context management for the filters and other functions, such as non-reentrant file I/O, are also provided by the model.

ABSTRACT WORD COUNT: 145

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 040616 A2 Published application without search report LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200425 2201
SPEC A (English) 200425 8890
Total word count - document A 11091
Total word count - document B 0
Total word count - documents A + B 11091

1/5/3 (Item 2 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS

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#### 01439306

Method and system for deterministic ordering of software modules Methode und System zum deterministischen Ordnen von Software Modulen Methode et systeme pour ordre deterministe de modules logiciels PATENT ASSIGNEE:

MICROSOFT CORPORATION, (749866), One Microsoft Way, Redmond, WA 98052, (US), (Applicant designated States: all)

INVENTOR:

Golds, David, P., 3009 174th Avenue NE Redmond, Washington 98052, (US) Kaplan, Keith S., 23208 45th Avenue SE Bothell, Washington 98021, (US) Brown, Eileen C., 57 Etruria Street, #30, Seattle Washington 98109, (US) Christiansen, Neal, 420 110th Avenue SE, Bellevue Washington 98004, (US LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721), Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1225509 A2 020724 (Basic)

EP 1225509 A3 040922

APPLICATION (CC, No, Date): EP 2002001445 020121; PRIORITY (CC, No, Date): US 768098 010123

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-009/445

#### ABSTRACT EP 1225509 A2

A method and system for ordering software modules in a guaranteed order for execution. Unique values are statically assigned to software modules (e.g., filter drivers) when fully developed. Each module's assigned value determines its relative position to other modules in a stack or other arrangement, fixing the execution order for any set of filter drivers. Static values may comprise floating-point numbers, whereby each new

software module may be assigned a number that enables positioning it between any two existing software modules. For example, filter drivers may be generally classified and assigned values in a range according to type. Drivers of the same type may be ordered within their general range to guarantee one possible ordering. A filter manager architecture is described, in which filter drivers register with a manager for relevant file system I/O operations. The manager calls appropriately registered filter drivers in an order based on their assigned numbers.

ABSTRACT WORD COUNT: 151

NOTE:

Figure number on first page: 2

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 020724 A2 Published application without search report Search Report: 040922 A3 Separate publication of the search report LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200230 684
SPEC A (English) 200230 5223
Total word count - document A 5907
Total word count - document B 0
Total word count - documents A + B 5907

#### 1/5/4 (Item 3 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

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01430742

Method and system for transparently extending non-volatile storage Verfahren und System zur transparenten Erweiterung von einem nichtfluchtigen Speicher

Methode et systeme pour etendre de facon transparente une memoire non volatile

PATENT ASSIGNEE:

MICROSOFT CORPORATION, (749866), One Microsoft Way, Redmond, WA 98052, (US), (Applicant designated States: all)

INVENTOR:

Golds, David P., P.O. Box 3009, 174th Avenue NE, Redmond, Washington 98052, (US

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721), Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1209556 A2 020529 (Basic)

APPLICATION (CC, No, Date): EP 2001124787 011017;

PRIORITY (CC, No, Date): US 697265 001026

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-003/06

#### ABSTRACT EP 1209556 A2

Briefly, the present invention provides a system and method for transparently extending the non-volatile storage on a computer system via links from one drive to one or more other drives. When the user adds a new disk drive, it is formatted but not mounted where the user can see it. The data of selected files is automatically migrated from the original drive to the new, supplemental drive, or directly created thereon, and a link is placed on the original volume to indicate to the system that the data is really elsewhere. In one implementation, this is accomplished via an NTFS reparse point on an NTFS link that is made a sparse file, thereby reclaiming the disk space on the original drive. A driver in the NTFS filter stack or the like in conjunction with the file system handles directing reads and writes to the new location, and also handles other operations including totaling the free space of each drive in response to a free space request. The driver may also enforce file operation rules, that may depend on whether the supplemental drive and/or

'supplemental file system is present or removed, and so forth. In this manner, the size of the original drive increases from a user's perspective, while providing a unified view of namespace, with file names present even when the supplemental drive is removed. ABSTRACT WORD COUNT: 226 NOTE: Figure number on first page: 1 LEGAL STATUS (Type, Pub Date, Kind, Text): Application: 020529 A2 Published application without search report LANGUAGE (Publication, Procedural, Application): English; English FULLTEXT AVAILABILITY: Available Text Language Update Word Count 579 CLAIMS A (English) 200222 200222 -4829 SPEC A (English) 5408 Total word count - document A Total word count - document B 0 Total word count - documents A + B 5408 1/5/5 (Item 4 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS (c) 2004 European Patent Office. All rts. reserv. 01370427 METHOD AND SYSTEM FOR PROVIDING COMMON COORDINATION AND ADMINISTRATION OF MULTIPLE SNAPSHOT PROVIDERS VORRICHTUNG UND VERFAHREN ZUR ALLGEMEINEN KOORDINATION UND LEITUNG VON MEHRFACHEN SCHNAPPSCHUSSANBIETERN PROCEDE ET SYSTEME DE COORDINATION ET DE GESTION COMMUNES DE FOURNISSEURS D'INSTANTANES MULTIPLES PATENT ASSIGNEE: MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington 98052-6399, (US), (Applicant designated States: all) INVENTOR: CABRERA, Luis, Felipe, 2009 Killarney Way, Southeast, Bellevue, WA 98004, OLTEAN, Paul, 1632 168th Ave.NE, Bellevue, WA 98008, (US) GOLDS, David P., P.O. Box 522,, Redmond, WA 98008, (US) STEINER, Stefan, R., 4220 249th Court, Southeast, Issaquah, WA 98029, (US LEGAL REPRESENTATIVE: Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721) , Maximilianstrasse 58, 80538 Munchen, (DE) PATENT (CC, No, Kind, Date): EP 1277114 A1 030122 (Basic) WO 2001082083 011101 APPLICATION (CC, No, Date): EP 2000939613 000606; WO 2000US15587 000606 PRIORITY (CC, No, Date): US 556533 000424 DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI INTERNATIONAL PATENT CLASS: G06F-011/14 CITED PATENTS (WO A): XP 2154739 CITED REFERENCES (WO A): US 5835953 A "GET DATABASE SERVER APPLICATION INFORMATION FOR THE OS/2 DATABASE MANAGER" IBM TECHNICAL DISCLOSURE BULLETIN, vol. 34, no. 3, August 1991 (1991-08), pages 113-114, XP002154739 Armonk, NY, US; NOTE: No A-document published by EPO LEGAL STATUS (Type, Pub Date, Kind, Text): Application: 020102 Al International application. (Art. 158(1)) Application: 020102 Al International application entering European phase Application: 030122 Al Published application with search report

030122 Al Date of request for examination: 20021119

040324 Al Date of dispatch of the first examination

030326 Al Inventor information changed: 20030206

Examination:

Examination:

Change:

report: 20040205

LANGUAGE (Publication, Procedural, Application): English; English; English

(Item 1 from file: 349) 1/5/6 DIALOG(R) File 349: PCT FULLTEXT (c) 2004 WIPO/Univentio. All rts. reserv. \*\*Image available\*\* 00848477 METHOD AND SYSTEM FOR PROVIDING COMMON COORDINATION AND ADMINISTRATION OF MULTIPLE SNAPSHOT PROVIDERS PROCEDE ET SYSTEME DE COORDINATION ET DE GESTION COMMUNES DE FOURNISSEURS D'INSTANTANES MULTIPLES Patent Applicant/Assignee: MICROSOFT CORPORATION, One Microsoft Way, Redmond, WA 98052, US, US (Residence), US (Nationality) CABRERA Luis Felipe, 2009 Killarney Way, Southeast, Bellevue, WA 98004, OLTEAN Paul, Apartment 127, 4850 156 Avenue, Northeast, Redmond, WA 98052 GOLDS David P., Apartment SS257, 4306 156th Avenue, Northeast, Redmond, WA 98052, US, STEINER Stefan R, 4220 249th Court, Southeast, Issaquah, WA 98029, US Legal Representative: ROCCI Steven J (et al) (agent), Woodcock Washburn Kurtz Mackiewicz & Norris LLP, 46th floor, One Liberty Place, Philadelphia, PA 19103, US, Patent and Priority Information (Country, Number, Date): WO 200182083 A1 20011101 (WO 0182083) WO 2000US15587 20000606 (PCT/WO US0015587) Application: Priority Application: US 2000556533 20000424 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT

TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-011/14

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 6650

#### English Abstract

A service specified by an application programming interface (API) acts as a coodinator/manager of different volume snapshot providers and an administrator of snapshot providers. The API acts to standardize protocols used in connection with different snapshot providers. An Interface Volume Snapshot Service Coordinator (VSSC) with appropriate API calls is provided, which is used to coordinate and administer multiple snapshot providers as well as maintain other snapshot information. The VSSC achieves this coordination and administration whether or not the snapshot providers are hardware-based, software-based or based in a combination of different underlying technologies. The VSSC thus performs coordination and administration operations, in addition to other operations relating to snapshot providers.

#### French Abstract

Un service specifie par une interface de programmation d'application (API) agit comme coordinateur/gestionnaire de differents fournisseurs d'instantanes de volumes et comme gestionnaire de fournisseurs d'instantanes. L'interface API sert a standardiser les protocoles utilises en relation avec differents fournisseurs d'instantanes. On dispose d'une interface Coordinateur de service d'instantanes de volumes (VSSC) qui est dotee des appels API appropries et est utilisée pour coordonner et gerer plusieurs fournisseurs d'instantanes multiples ainsi que pour actualiser d'autres informations d'instantanes. Le VSSC assure cette coordination et cette gestion que les fournisseurs d'instantanes soient ou non bases materiel, bases logiciel ou bases dans une association de differentes technologies sous-jacentes. Le VSSC effectue ainsi des operations de coordination et de gestion en plus d'autres operations concernant les fournisseurs d'instantanes.

Legal Status (Type, Date, Text)
Publication 20011101 A1 With international search report.
Examination 20020110 Request for preliminary examination prior to end of 19th month from priority date

1/5/7 (Item 1 from file: 350)
DIALOG(R) File 350: Derwent WPIX
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016320758 \*\*Image available\*\*
WPI Acc No: 2004-478653/200445

XRPX Acc No: N04-377349

File processing method in computer system, involves calling filter drivers with specified pre-callback based on pre-callback order and passing data corresponding to input request to filters

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: BROWN E C; CHRISTIANSEN N; DEWEY B K; GOLDS D P ; PUDIPEDDI R;
THIND R; ZBIKOWSKI M J

Number of Countries: 036 Number of Patents: 006

Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 20040111389 A1 20040610 US 2002315384 20021209 200445 B Α A1 20040609 CA 2450044 20031118 CA 2450044 Α 200445 EP 1429247 Α2 20040616 EP 200328234 Α 20031209 200445 JP 2004192648 A JP 2003409683 20040708 Α 20031208 200445 BR 200305401 Α 20040831 BR 20035401 Α 20031203 200460 CN 1508679 Α 20040630 CN 2003122571 Α 20031209 200462

Priority Applications (No Type Date): US 2002315384 A 20021209 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20040111389 A1 22 G06F-007/00

CA 2450044 A1 E G06F-013/00

EP 1429247 A2 E G06F-009/46

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

JP 2004192648 A 36 G06F-012/00

BR 200305401 A G06F-012/08

CN 1508679 A G06F-009/44

Abstract (Basic): US 20040111389 A1

NOVELTY - The method involves calling the filter drivers with specified pre-callback based on the pre-callback order, according to the requests for which the drivers have registered, when a file system input/output request is received by the file system. The data corresponding to the request is forwarded to the drivers along with the request.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- computer readable recorded medium storing file processing program;
  - (2) operating system; and
  - (3) computer readable recorded medium storing operating program.

USE - For processing file access request in computer system.

ADVANTAGE - Since only registered filters are called for particular function, efficient context management for the filters and other functions, such as non-reentrant file input/output, are provided.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the computer system.

pp; 22 DwgNo 1/7

Title Terms: FILE; PROCESS; METHOD; COMPUTER; SYSTEM; CALL; FILTER; DRIVE; SPECIFIED; PRE; BASED; PRE; ORDER; PASS; DATA; CORRESPOND; INPUT; REQUEST; FILTER

Derwent Class: T01

International Patent Class (Main): G06F-007/00; G06F-009/44; G06F-009/46; G06F-012/00; G06F-012/08; G06F-013/00

International Patent Class (Additional): G06F-013/14; G06F-017/30

File Segment: EPI

1/5/8 (Item 2 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

015789198 \*\*Image available\*\* WPI Acc No: 2003-851401/200379 Related WPI Acc No: 2001-615810

XRPX Acc No: N03-679925

Logical volume creating and maintaining method for computer disk storage, involves receiving write request to one volume in snapshots, and providing snapshots when snapshot for each volume is successfully captured

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: ANDREW B D; GOLDS D P; KUSTERS N P; LOVINGER D E;

WICKREMATILLAKE S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 6647473 B1 20031111 US 2000505344 A 20000216 200379 B

Priority Applications (No Type Date): US 2000505344 A 20000216 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6647473 B1 14 G06F-013/00

Abstract (Basic): US 6647473 B1

NOVELTY - The method involves receiving a request to capture a set of snapshots of a corresponding set of volumes (215, 217, 219). A snapshot-ready state is coordinated for each volume, and information indicative of when each volume in the snapshot ready state is provided. A write request to one volume in the snapshots is received and held, and the snapshots are provided when the snapshot for each volume is successfully captured.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the

following:

(1) a computer system implementing logical volume creating and maintaining method

(2) a computer readable medium for logical volume creating and maintaining method.

USE - Used for creating and maintaining of logical volume in computer disk storage.

ADVANTAGE - The method can coordinate snapshot sets across multiple volumes so that crash recovery software or the like can reliably reconstruct related files distributed across those multiple volumes.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram representing a snapshot system capable of being used in conjunction with the computer system implementing logical volume creating and maintaining method.

Snapshot system (200)

User mode (201)

Writer program (209)

Volumes (215, 217, 219) Volume manager (220, 221, 224) File system (222, 223, 225)

pp; 14 DwgNo 2/7

Title Terms: LOGIC; VOLUME; MAINTAIN; METHOD; COMPUTER; DISC; STORAGE; RECEIVE; WRITING; REQUEST; ONE; VOLUME; SNAPSHOT; SNAPSHOT; VOLUME; SUCCESS; CAPTURE

Derwent Class: T01

International Patent Class (Main): G06F-013/00

File Segment: EPI

1/5/9 (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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015331321 \*\*Image available\*\* WPI Acc No: 2003-392256/200337

XRPX Acc No: N03-313389

Computer readable medium for computing system, stores instruction to read writer metadata file, to identify component and to interface with service, to create image within specified time and to back-up identified component

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: BERKOWITZ B; GOLDS D ; INGEN C V; JOHNSON M C; OLSSON S E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20030028736 A1 20030206 US 2001912615 A 20010724 200337 B

Priority Applications (No Type Date): US 2001912615 A 20010724

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20030028736 A1 27 G06F-013/00

Abstract (Basic): US 20030028736 A1

NOVELTY - The medium stores instruction to create writer metadata file including an identifier of the writer and description of the components that to be included in back-up operation stored in computing system (100). A requester is configured to read the writer metadata file, to identify the components and to interface with a service to create an image within specified time and to back-up identified component.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) computer implemented method for backing up data; and

(2) computer implemented method for restoring backed up data.

USE - For computing system.

ADVANTAGE - Provides a mechanism for multiple applications to exchange information with a common back-up program regarding components of the application. The back-up operation is performed efficiently without considering the system off-line or disrupting users.

DESCRIPTION OF DRAWING(S) - The figure shows the functional block diagram of computing device.

computing system (100)

pp; 27 DwgNo 1/5

Title Terms: COMPUTER; READ; MEDIUM; COMPUTATION; SYSTEM; STORAGE; INSTRUCTION; READ; WRITING; FILE; IDENTIFY; COMPONENT; INTERFACE; SERVICE; IMAGE; SPECIFIED; TIME; BACK; UP; IDENTIFY; COMPONENT

Derwent Class: T01

International Patent Class (Main): G06F-013/00

File Segment: EPI

1/5/10 (Item 4 from file: 350)
DIALOG(R) File 350: Derwent WPIX

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014700878 \*\*Image available\*\*

WPI Acc No: 2002-521582/200256

XRPX Acc No: N02-412723

Computer system storage capacity increment method involves copying source file of existing disk drive file system, to new supplemental disk drive and providing link file to it

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: GOLDS D P

Number of Countries: 027 Number of Patents: 002

Patent Family:

Week Date Applicat No Kind Patent No Kind Date 20011017 200256 B A2 20020529 EP 2001124787 Α EP 1209556 20011026 Α JP 2002169712 A 20020614 JP 2001329738

Priority Applications (No Type Date): US 2000697265 A 20001026

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1209556 A2 E 15 G06F-003/06

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

JP-2002169712 A- 13 G06F-012/00

Abstract (Basic): EP 1209556 A2

NOVELTY - A portion of file data of a source file selected from an existing disk drive file system (36), is copied to a new supplemental disk drive added to the computer system. A link file maintained on the existing file system, is also provided to the file data copied to the new disk drive.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Computer storage capacity incrementing system; and
- (2) File creation method in computer system.

USE - For incrementing computer system storage capacity.

ADVANTAGE - Enables working with removable and non-removable drives, allowing users to transparently and quickly extend their storage capacity without dealing with separate volumes. Since the link file is maintained in the existing file system also, the name space remains unchanged even if the new drive is removed, that is a user can view the full volume directory even if the new drive is removed. Overcomes the problem of having a single file system volume span multiple spindles. Information about link's source is stored with the target's link so that link is bidirectional and thus original location of files may be recovered even if the original drive fails or is unavailable.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of the computer system.

Existing disk drive file system (36)

pp; 15 DwgNo 1/7

Title Terms: COMPUTER; SYSTEM; STORAGE; CAPACITY; INCREMENT; METHOD; COPY; SOURCE; FILE; EXIST; DISC; DRIVE; FILE; SYSTEM; NEW; SUPPLEMENTARY; DISC; DRIVE; LINK; FILE

Derwent Class: T01; T03

International Patent Class (Main): G06F-003/06; G06F-012/00

File Segment: EPI

1/5/11 (Item 5 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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014179040 \*\*Image available\*\*

WPI Acc No: 2001-663268/200176

XRPX Acc No: N01-494181

System for providing common coordination and administration of multiple snapshot providers using an interface volume snapshot service coordinator to coordinate and administer snapshots

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Inventor: CABRERA L F; GOLDS D P; OLTEAN P; STEINER S R
Number of Countries: 093 Number of Patents: 006
Patent Family:
Patent No Kind Date Applicat No Kind Date
WO 200182083 A1 20011101 WO 2000US15587 A 20000606
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Patent Assignee: MICROSOFT CORP (MICT )

Week 20000606 200176 AU 200054677 Α 20011107 AU 200054677 Α 20000606 200219 EP 1277114 Α1 20030122 EP 2000939613 Α 20000606 200308 WO 2000US15587 A 20000606 JP 2003532191 W 20031028 WO 2000US15587 A 20000606 200373 JP 2001579106 20000606 Α CN 1452738 Α 20031029 CN 2000819466 20000606 Α 200409 US 6708227 20040316 US 2000556533 В1 Α 20000424 200420

Priority Applications (No Type Date): US 2000556533 A 20000424 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes WO 200182083 A1 E 32 G06F-011/14

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200054677 A G06F-011/14 Based on patent WO 200182083
EP 1277114 A1 E G06F-011/14 Based on patent WO 200182083
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL PT RO SE SI

JP 2003532191 W 38 G06F-012/00 Based on patent WO 200182083

CN 1452738 A G06F-011/14 US 6708227 B1 G06F-009/00

Abstract (Basic): WO 200182083 A1

NOVELTY - A request can be made directly to a snapshot provider (SP1) to simplify the process, I.e. when multiple providers (SP1-SPN) are not necessary. An application programming interface acts as the coordinator/manager of the providers and the coordinator (100) coordinates and administers the multiple providers while maintaining other snapshot information. The coordinator achieves coordination and administration whether or not the providers are hardware-based, software-based or based on a combination of underlying technologies.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for a method for standardizing communications between services and plural snapshot providers, for a computer readable medium with instructions, for a data structure with identification information and for an application programming interface.

 $\ensuremath{\mathsf{USE}}$  - Providing common coordination and administration of multiple snapshot providers.

 $\label{eq:advantage} \mbox{ADVANTAGE - Standardizing protocol used to communicate among providers.}$ 

DESCRIPTION OF DRAWING(S) - The drawing shows a coordinator Service providers (SP) Coordinator (100)

pp; 32 DwgNo 8/8

Title Terms: SYSTEM; COMMON; COORDINATE; ADMINISTER; MULTIPLE; SNAPSHOT; INTERFACE; VOLUME; SNAPSHOT; SERVICE; COORDINATE; COORDINATE; ADMINISTER; SNAPSHOT

Derwent Class: T01

International Patent Class (Main): G06F-009/00; G06F-011/14; G06F-012/00 International Patent Class (Additional): G06F-009/46; G06F-011/34 File Segment: EPI

1/5/12 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014131599 \*\*Image available\*\*
WPI Acc No: 2001-615810/200171
Related WPI Acc No: 2003-851401

XRPX Acc No: N01-459376

Method for deterministic ordering of installable software modules in a computer system such as file system filter drivers in guaranteed ordered of execution

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: BROWN E C; CHRISTIANSEN N; GOLDS D P; KAPLAN K S

Number of Countries: 027 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20010020245 A1 20010906 US 2000505344 A 20000216 200171 B

US 2001768098 A 20010123

EP 1225509 A2 20020724 EP 20021445 A 20020121 200256

Priority Applications (No Type Date): US 2001768098 A 20010123; US 2000505344 A 20000216

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20010020245 A1 13 G06F-009/00 CIP of application US 2000505344

EP\_1225509 A2 E G06F-009/445

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

Abstract (Basic): US 20010020245 A1

NOVELTY - Unique values are statically assigned to software modules (e.g., filter drivers) when fully developed. Each module's assigned value determines its relative position to other modules in a stack or other arrangement, fixing the execution order for any set of filter drivers. Static values consist of floating-point numbers, with each new software module assigned a number that enables positioning it between any two existing software modules.

DETAILED DESCRIPTION - For example, filter drivers may be generally classified and assigned values in a range according to type. Drivers of the same type may be ordered within their general range to guarantee one possible ordering. INDEPENDENT CLAIMS are included for a mechanism and a computer readable medium for ordering software modules.

USE - Method for deterministic ordering of installable software modules in a computer system such as file system filter drivers.

ADVANTAGE - Guarantees order of execution of filter drivers as each new software module can be added between other modules without the other modules requiring renumbering.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram of a filter order.

pp; 13 DwgNo 3/7

Title Terms: METHOD; ORDER; SOFTWARE; MODULE; COMPUTER; SYSTEM; FILE; SYSTEM; FILTER; DRIVE; GUARANTEE; ORDER; EXECUTE

Derwent Class: T01

International Patent Class (Main): G06F-009/00; G06F-009/445

International Patent Class (Additional): G06F-013/10

File Segment: EPI

Set	Items	Description						
S1	253	NAMESPACE? OR NAME()SPACE?						
S2	2890026	DETECT? OR DETERMIN? OR RECOGNI? OR IDENTIF?						
\$3	4650918	NEW OR NEWER OR OTHER OR ANOTHER OR ADDITIONAL OR SUPPLEME-						
		TARY						
S4	1000936	LINK? OR POINTER? OR ADDRESS? OR TAG OR TAGS OR FLAG? ? OR						
INDICATOR? OR TOKEN?								
S5	3318567							
S6	3413							
		OR FILES OR DRIVE) OR SPARSEFILE?						
s7	1408728	MULTIPLE OR MANY OR PLURAL OR NUMEROUS OR SEVERAL						
S8	0	S2 AND (S3 (2N) S5) AND S1						
S9	12	S2 AND (S3 (2N) S5) AND S6						
S10	226	S4 AND S6 AND S5						
S11	12	S4 AND S6 AND (S3 (2N) S5)						
S12	0	S1 AND S2 AND S4 AND S5 AND S6						
S13	3662	S1 OR S6						
S14	67	S13 AND S2 AND S4 AND S5						
S15	89							
S16	22							
S17	13	S4 AND S6 AND (S3 (3N) S5)						
S18		S17 AND IC=G06F?						
S19	7	S18 NOT S16						
	90	S15 OR S17						
S21		S20 AND MC=(T01-C01 OR T01-F05E OR T03-A08A5 OR T03-A10E3 -						
	. 0	R T03-N01)						
S22	10	· ·						
S23	6							
File	File 347: JAPIO Nov 1976-2004/May(Updated 040903)							
	(c) 2004 JPO & JAPIO							
File	File 350:Derwent WPIX 1963-2004/UD, UM &UP=200462							
	(c) 2004 Thomson Derwent							

(Item 2 from file: 347)

(Japan)

DIALOG(R) File 347: JAPIO

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\*\*Image available\*\* 02556240

GENERATING METHOD FOR DATA WITH MULTIPLE STAGE TABLE STRUCTURE

PUB. NO.:

63-173140 [JP 63173140 A]

PUBLISHED:

July 16, 1988 (19880716)

INVENTOR(s): KAWAGUCHI HIROSHI

APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP

APPL. NO.:

62-005602 [JP 875602]

FILED:

January 13, 1987 (19870113)

INTL CLASS:

[4] G06F-012/00; G06F-007/22

JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units)

JOURNAL:

Section: P, Section No. 791, Vol. 12, No. 451, Pg. 7,

November 28, 1988 (19881128)

#### ABSTRACT

PURPOSE: To easily generate a data with multiple stage table structure, by generating a bi-sected tree file by inputting a file in which a bit of terminal information and the corresponding index of a table at each stage make a pair.

CONSTITUTION: On a source file 1, the index (f) of the table 5-1, the index (s) of the table 5-2, and the bit of terminal information 5-3 are described as the pair at every row. A bi-sected tree structure conversion means 2 reads the file row by row, and generates the bi-sected tree file 3 and a terminal information file 5-3. In this case, the node of a bi-sected tree corresponding to the table 5-1 is retrieved, and a new added at need, and next, the node of the bi-sected tree corresponding to the table 5-2 is retrieved, and the new node is added. And the node address of the bi-sected tree is received as an argument, and the address of the node of a partial tree at the right or the left of each node is returned.

#### (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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015910687

\*\*Image available\*\*

WPI Acc No: 2004-068527/200407

Related WPI Acc No: 2004-374429

XRPX Acc No: N04-055128

Relational database graph management method involves identifying nodes and links associated with name space handle, to generate and store segment corresponding to nodes and links

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: LORD R W; SUVER C A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date US 6665863 B1 20031216 US 2000583427 Α 20000531

Priority Applications (No Type Date): US 2000583427 A 20000531

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6665863 В1 33 G06F-017/30

Abstract (Basic): US 6665863 B1

NOVELTY - A handle to a variable is determined using a name space handle. The identity of nodes and links associated with the name space handle is determined. The handle of the identified.

nodes and links are generated and stored. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for graph management system. USE - For managing graph in database storing street name, street number, city, state, country, and postal code, using computer system such as handheld device, multiprocessor system, microprocessor-based or programmable consumer electronics, network personal computer, minicomputer, mainframe computer. ADVANTAGE - The degree of association of nodes and links , is improved by obtaining handle to each of the nodes and links . DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the graph management system.

pattern (1800) variables (1810-1890)

pp; 33 DwgNo 18/18 Title Terms: RELATED; DATABASE; GRAPH; MANAGEMENT; METHOD; IDENTIFY; NODE ; LINK ; ASSOCIATE; NAME; SPACE; HANDLE; GENERATE; STORAGE ; SEGMENT; CORRESPOND; NODE; LINK

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

(Item 13 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv.

012907808 \*\*Image available\*\* WPI Acc No: 2000-079644/200007

XRPX Acc No: N00-062909

Increment file system for financial data processing - has file access file based on delta file redirector to direct access to original stored on one memory area

Patent Assignee: HEWLETT-PACKARD CO (HEWP

Inventor: TESTARDI R P

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week JP 11327981 19991130 JP 9990908 19990331 200007 B Α Α B1 20020416 US 9860284 US 6374268 Α 19980414 200232

Priority Applications (No Type Date): US 9860284 A 19980414

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

18 G06F-012/00 JP 11327981 A

US 6374268 G06F-017/30 B1

Abstract (Basic): JP 11327981 A

NOVELTY - A file generation interceptor intercepts the file generation demand containing the access mode sign directed to original file stored on one memory area as a base set. A file access redirector directs the access to original file according to delta file stored on another memory area.

USE - For share access of financial data and during software development etc.

ADVANTAGE - Since the file access demand is forced to original file or shadow file depending on access mode, any change in a part of file is stored automatically and the link between changed file and file is not changed. Memory needed in each session is reduced and the possibility of error due to manual calculation is reduced. DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of data processing system with IPS.

Dwg.1/5

Title Terms: INCREMENT; FILE; SYSTEM; FINANCIAL; DATA; PROCESS; FILE; ACCESS; DIRECT; ACCESS; ORIGINAL; FILE; BASED; DELTA; FILE; STORAGE; ONE; MEMORY; AREA

Derwent Class: T01

International Patent Class (Main): G06F-012/00; G06F-017/30

File Segment: EPI

16/5/16 (Item 14 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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012813659 \*\*Image available\*\*
WPI Acc No: 1999-619890/199953

XRPX Acc No: N99-457179

Source file data transmitting method in data processing system

Patent Assignee: MICROCOM SYSTEMS INC (MICR-N)

Inventor: CARSON D A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 5978805 A 19991102 US 9617750 A 19960515 199953 B

US 97856111 A 19970514

Priority Applications (No Type Date): US 9617750 P 19960515; US 97856111 A 19970514

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5978805 A 55 G06F-017/00 Provisional application US 9617750

Abstract (Basic): US 5978805 A

NOVELTY - When a portion of reference item matches with specific portion of source file, the source block checksum is determined as the function of specific source blocks of data from source file including the matching portion of source file. When the source block checksum matches with another portion of reference item, the reference block is copied into destination memory location.

DETAILED DESCRIPTION - The reference file is divided into reference data blocks having several data. One or more reference item comprising original reference file data, is **determined** as the function of data of reference data block, reference block length value and unique reference block checksum value. An INDEPENDENT CLAIM is also included for **source file** data transmitting apparatus used in data processing system.

USE - For transmitting source file data from one memory location to destination memory location of data processing system.

location to destination memory location of data processing system.

ADVANTAGE - The contents of file stored in source system and destination system, can be duplicated without transmitting the entire file from one system to another. When the destination computer has a file similar to the file to be duplicated, it is enough to transmit a portion of file over the communication link to the destination computer, thus enabling duplication of file in faster manner and improving usage efficiency of communication link.

DESCRIPTION OF DRAWING(S) — The figure illustrates the data transmission procedure carried out between destination and source system.

pp; 55 DwgNo 4/14

Title Terms: SOURCE; FILE; DATA; TRANSMIT; METHOD; DATA; PROCESS; SYSTEM

Derwent Class: T01

International Patent Class (Main): G06F-017/00

File Segment: EPI

16/5/17 (Item 15 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012457048 \*\*Image available\*\* WPI Acc No: 1999-263156/199922

XRPX Acc No: N99-195990

UNIX man file to help topic file conversion method

Patent Assignee: NCR CORP (NATC )

Inventor: DOOLEY M R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 5893916 A 19990413 US 96764376 A 19961213 199922 B

Priority Applications (No Type Date): US 96764376 A 19961213

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5893916 A 14 G06F-017/00

Abstract (Basic): US 5893916 A

NOVELTY - A man file is received at a computer, which generates a help topic file from the received man file by converting font text tags in the working document into corresponding formatting codes. The conversion is achieved by retrieving a man page identifier from the man file, and building a help topic footnote using the identifier. The help topic is then stored with the help topic footnote in a help topic file.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

- (i) an apparatus for converting a UNIX man file into a help topic file
- (ii) a program storage device embodying program instruction to perform the method of converting a UNIX man file into a help topic file USE - Converting a UNIX man file to a help topic file.

ADVANTAGE - Permits existing UNIX man files to be reused, often producing source files that may be complied for use on multiple platforms. The need to scan hardcopies, perform optical character recognition, and manually reformat the scanned-in text is reduced or eliminated.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart illustrating an overall program flow.

pp; 14 DwgNo 2/7

Title Terms: MAN; FILE; HELP; TOPIC; FILE; CONVERT; METHOD

Derwent Class: T01

International Patent Class (Main): G06F-017/00

File Segment: EPI

#### 16/5/19 (Item 17 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010742688 \*\*Image available\*\*
WPI Acc No: 1996-239643/199624
Related WPI Acc No: 1996-209975

XRPX Acc No: N96-200539

Tree data structure manipulation and source code translation method for high-level computer languages - generating translated static fragments in face of textual inconsistencies, and target language definition of each new source language static fragment, and encapsulating differences in new parameters

Patent Assignee: TANDEM COMPUTERS INC (TAND )
Inventor: ANDREWS K A; DEL VIGNA P; MOLLOY M E
Number of Countries: 019 Number of Patents: 006

Рат	cent ramity	:							
Pat	ent No	Kind	Date	Apı	plicat No	Kind	Date	Week	
WO	9613784	A2	19960509	WO	95US14206	Α	19951101	199624	В
WO	9613784	A3	19960815	WO	95US14206	Α	19951101	199641	
ΕP	789885	<b>A</b> 1	19970820	EP	95939706	Α	19951101	199738	
				WO	95US14206	Α	19951101		
US	5842204	A	19981124	US	94319682	Α	19941007	199903	
				US	94332966	Α	19941101		
JР	11501421	W	19990202	WO	95US14206	Α	19951101	199915	
				JΡ	96514847	A	19951101		
US	6006031	Α	19991221	US	94319682	A	19941007	200006	

US 94332966 A 19941101 US 96664464 A 19960614

Priority Applications (No Type Date): US 94332966 A 19941101; US 94319682 A 19941007; US 96664464 A 19960614

Cited Patents: Jnl.Ref; EP 361737

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9613784 A2 E 46 G06F-017/30

Designated States (National): CA JP

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL

PT SE

US 6006031 A G06F-009/45 CIP of application US 94319682

Div ex application US 94332966

CIP of patent US 5768564 Div ex patent US 5842204

EP 789885 A1 E G06F-017/30 Based on patent WO 9613784

Designated States (Regional): DE FR GB IT SE

US 5842204 A G06F-007/00 CIP of application US 94319682

JP 11501421 W 66 G06F-009/45 Based on patent WO 9613784

WO 9613784 A3 G06F-017/30

#### Abstract (Basic): WO 9613784 A

The method for modifying a **memory** for access by an application program being executed on a computer involves, storing a hierarchical tree data structure in the **memory**, and **identifying** a first **node** of the tree to be modified which is ancestral to a sub-tree to be reallocated. A second **node** is created, and the sub-tree is delinked from the first **node**. The second **node** is **linked** as a child of the first **node**, and the sub-tree is **linked** as a child of the second **node**.

USE/ADVANTAGE - In source-to-source translator for improving preservation in high-level computer language of invocation expressions and preprocessor characteristics e.g macros, source file inclusion structure and commentary, contained in high-level language. Enables 'tree-surgery', e.g dissection of hierarchical tree data structure and insertion of node at point of dissection.

Dwg.8/13

Title Terms: TREE; DATA; STRUCTURE; MANIPULATE; SOURCE; CODE; TRANSLATION; METHOD; HIGH; LEVEL; COMPUTER; LANGUAGE; GENERATE; TRANSLATION; STATIC; FRAGMENT; FACE; TEXT; TARGET; LANGUAGE; DEFINE; NEW; SOURCE; LANGUAGE; STATIC; FRAGMENT; ENCAPSULATE; DIFFER; NEW; PARAMETER

Derwent Class: T01

International Patent Class (Main): G06F-007/00; G06F-009/45; G06F-017/30

International Patent Class (Additional): G06F-009/44

File Segment: EPI

19/5/1 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

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07301232 \*\*Image available\*\*

METHOD AND SYSTEM FOR TRANSPARENTLY EXPANDING NONVOLATILE STORAGE

PUB. NO.: 2002-169712 [JP 2002169712 A]

PUBLISHED: June 14, 2002 (20020614)

INVENTOR(s): GOLDS DAVID P
APPLICANT(s): MICROSOFT CORP

APPL. NO.: 2001-329738 [JP 2001329738] FILED: October 26, 2001 (20011026)

PRIORITY: 00 697265 [US 2000697265], US (United States of America),

October 26, 2000 (20001026)

INTL CLASS: G06F-012/00; G06F-003/06

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a system and a method for transparently expanding a nonvolatile storage on a computer system through a link connecting one drive to one or more other drives.

SOLUTION: When a user adds a new disk drive, the drive is formatted, but not mounted where the user can see it. The data of a selected file are automatically migrated from its original drive to a new supplementary drive or generated directly on the new supplementary drive and the link is placed on the original volume so as to let the system know that the data are placed actually in another place. In one embodiment, that is carried out through an NTFS reparse point on an NTFS link made in the form of a sparsefile, so that disk space on the original drive can be reused.

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19/5/2 (Item 2 from file: 347)

DIALOG(R) File 347: JAPIO

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04821844 \*\*Image available\*\*
FILE MOVEMENT CONTROL SYSTEM

PUB. NO.: 07-114444 [JP 7114444 A] PUBLISHED: May 02, 1995 (19950502)

INVENTOR(s): NAKAYAMA SHINICHI

MURATA TOMOHIRO KURIHARA KENZO NITSUTA MITSUAKI

APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 05-260633 [JP 93260633]
FILED: October 19, 1993 (19931019)
INTL CLASS: [6] G06F-003/06; G06F-012/00

JAPIO CLASS: 45.3 (INFORMATION PROCESSING -- Input Output Units); 42.5

(ELECTRONICS -- Equipment); 45.2 (INFORMATION PROCESSING --

Memory Units)

#### ABSTRACT

PURPOSE: To allow **other disk** controller to accept a data reference update request from a host computer during file movement or copy processing by storing file processing control information in a drive so as to improve the reliability of the file against a fault of a file processing unit.

CONSTITUTION: A disk controller 100 receives a storage location of a movement source file 150 and a movement destination file 151 and a movement command between them from a host computer 109, then allocates a destination track in the unit of tracks, copies data on a source track to

the destination track sequentially and connects the source track and the destination track by means of an alternate track pointer . A reference update request from the host computer 109 is executed to data on the source track when the data of the source track are not copied. When the data of the source track are copied, the request is executed to data on the destination track pointed out by the alternate track pointer .

19/5/3 (Item 3 from file: 347)

DIALOG(R) File 347: JAPIO

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02111949 \*\*Image available\*\*

STORAGE CONTROL SYSTEM FOR INFORMATION STORAGE DEVICE

62-028849 [JP 62028849 A] PUB. NO.:

February 06, 1987 (19870206) PUBLISHED:

INVENTOR(s): INOSE SHUICHI

APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 60-169421 [JP 85169421] FILED: July 31, 1985 (19850731)

INTL CLASS: [4] G06F-012/00

JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units) JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers &

Microprocessers)

Section: P, Section No. 593, Vol. 11, No. 208, Pg. 44, July 07, 1987 (19870707) JOURNAL:

#### ABSTRACT

PURPOSE: To make storage capacity effective by constituting a new file of file and a different part from the original **file** at the an **original** formation and storage of a new file.

CONSTITUTION: When a file F2 is read out on the basis of a specification from an input device and the file F2 is decided as information based upon an old file F1 on the basis of the relation 1 to the file F2, the old file F1 is automatically read out. On the basis of relation 2, a file F0 storing information for changing positions is automatically read out and relative addresses indicating the changing points and changing data are read out. After reading out information from the files F1, F0, the data in the file F1 are changed and displayed such that '1' is changed to '0' in an item A and an item F is changed to an item G in accordance with data in a table 4.

19/5/6 (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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\*\*Image available\*\* 014700878

WPI Acc No: 2002-521582/200256

XRPX Acc No: N02-412723

Computer system storage capacity increment method involves copying file of existing disk drive file system, to new supplemental disk drive and providing link file to it

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: GOLDS D P

Number of Countries: 027 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date EP 1209556 A2 20020529 EP 2001124787 20011017 Α JP 2002169712 A 20020614 JP 2001329738 Α 20011026

Priority Applications (No Type Date): US 2000697265 A 20001026

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

A2 E 15 G06F-003/06 EP 1209556

. Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR
JP 2002169712 A 13 G06F-012/00

Abstract (Basic): EP 1209556 A2

NOVELTY - A portion of file data of a **source file** selected from an existing disk drive file system (36), is copied to a **new** supplemental **disk drive** added to the computer system. A **link** file maintained on the **existing file** system, is also provided to the file data copied to the **new disk drive**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the

following:

(1) Computer storage capacity incrementing system; and

(2) File creation method in computer system.

USE - For incrementing computer system storage capacity.

ADVANTAGE - Enables working with removable and non-removable drives, allowing users to transparently and quickly extend their storage capacity without dealing with separate volumes. Since the link file is maintained in the existing file system also, the name space remains unchanged even if the new drive is removed, that is a user can view the full volume directory even if the new drive is removed. Oversomes the problem of having a single file system volume

user can view the full volume directory even if the **new drive** is removed. Overcomes the problem of having a single file system volume span multiple spindles. Information about **link** 's source is stored with the target's **link** so that **link** is bidirectional and thus original location of files may be recovered even if the **original** drive fails or is unavailable.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of the computer system.

Existing disk drive file system (36)

pp: 15 DwgNo 1/7

Title Terms: COMPUTER; SYSTEM; STORAGE; CAPACITY; INCREMENT; METHOD; COPY; SOURCE; FILE; EXIST; DISC; DRIVE; FILE; SYSTEM; NEW; SUPPLEMENTARY; DISC;

DRIVE; LINK; FILE Derwent Class: T01; T03

International Patent Class (Main): G06F-003/06; G06F-012/00

File Segment: EPI

19/5/7 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009058186 \*\*Image available\*\* WPI Acc No: 1992-185568/199223

XRPX Acc No: N92-140092

Disk track emulation system for desk drives and controllers - uses home address area and count areas on disc to store sector position data

w.r.t. new and active data formats

Patent Assignee: FUJITSU LTD (FUIT

Inventor: MATSUSHIMA H

Number of Countries: 004 Number of Patents: 005

Patent Family:

Patent No Kind Date Applicat No Kind Date Week EP 488700 A2 19920603 EP 91310974 19911128 199223 B Α EP 488700 A3 19920909 EP 91310974 19911128 199338 Α US 5590311 Α 19961231 US 91800969 Α 19911202 199707 US 94259558 19940614 Α EP 488700 19980304 EP 91310974 199813 В1 Α 19911128 DE 629006 199820 DE 69129006 Ε 19980409 Α 19911128 EP 91310974 Α 19911128

Priority Applications (No Type Date): JP 90334167 A 19901130

Cited Patents: No-SR.Pub; EP 223611; EP 347032

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 488700 A2 E 25 G06F-003/06

Designated States (Regional): DE FR GB

US 5590311 A 25 G06F-013/00 Cont of application US 91800969

EP 488700 B1 E 21 G06F-003/06

Designated States (Regional): DE GB

DE 69129006 E G06F-003/06 Based on patent EP 488700

EP 488700 A3 G06F-003/06

Abstract (Basic): EP 488700 A

When a disk drive is replaced by a **new disk drive** having a disk track with a data format different from that of the **existing drive**, a program in an active host device can be used as it is, without reforming the program. The host-controller data transfer uses the existing format and controller-disk data transfer transfer uses the new format to maintain the compatibility. The controller generates logical and physical track **addressing** data to emulate the **existing drive**. A track on the **new disk** includes an area for home **address** data which indicates physical track position, and each track has a count area indicating physical record location.

 ${\tt ADVANTAGE}$  - Rewriting of controller software or exchanging of disk controller when changing disk format is not required.

Dwq.1/15

Title Terms: DISC; TRACK; EMULATION; SYSTEM; DESK; DRIVE; CONTROL; HOME; ADDRESS; AREA; COUNT; AREA; DISC; STORAGE; SECTOR; POSITION; DATA; NEW; ACTIVE; DATA; FORMAT

Derwent Class: T01; T03

International Patent Class (Main): G06F-003/06; G06F-013/00

International Patent Class (Additional): G06F-005/00

File Segment: EPI

23/5/1 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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015998085 \*\*Image available\*\*

WPI Acc No: 2004-155935/200415 Related WPI Acc No: 2003-800064

XRPX Acc No: N04-124834

File system for non-volatile memory medium used in processor, has header portion comprising various status such as name, block number of files and data portion having length of valid data

Patent Assignee: CISCO TECHNOLOGY INC (CISC-N)

Inventor: MAMILLAPLLI S; MONSEN R C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20040019784 A1 20040129 US 2000503588 A 20000214 200415 B
US 2003614070 A 20030702

Priority Applications (No Type Date): US 2000503588 A 20000214; US 2003614070 A 20030702

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20040019784 A1 12 H04L-009/00 Div ex application US 2000503588 Div ex patent US 6606628

Abstract (Basic): US 20040019784 A1

NOVELTY - The memory blocks has a header portion comprising a magic number which indicates memory block as valid file system block, name of the file, a set of **flags** indicating memory block of the file, block number of the next memory block, and a data portion having the length of valid data.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) non volatile memory medium;
- (2) method for opening an existing file stored on a non-volatile memory medium;
  - (3) storage device storing new file opening procedure;
- (4) apparatus for implementing a file system having a flat file structure; and
- (5) method for opening a new file to be stored on a non-volatile memory medium.

USE - For non-volatile memory medium used in processors such as microprocessors, microcontrollers, application specific integrated circuits (ASICs) and other types of commercial hardware or firmware devices.

ADVANTAGE - Performance is improved by providing required functions with simple structure.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the software component comprising non-volatile memory file system.

non-volatile memory file system (400) NVRAM file system manger process (410)

common platform (420)

specific platform (430)

pp; 12 DwgNo 4/4

Title Terms: FILE; SYSTEM; NON; VOLATILE; MEMORY; MEDIUM; PROCESSOR; HEADER; PORTION; COMPRISE; VARIOUS; STATUS; NAME; BLOCK; NUMBER; FILE; DATA; PORTION; LENGTH; VALID; DATA

Derwent Class: T01

International Patent Class (Main): H04L-009/00

File Segment: EPI

## 23/5/2 (Item 2 from file: 350) DIALOG(R) File 350: Derwent WPIX

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014649649 \*\*Image available\*\* WPI Acc No: 2002-470353/200250

XRPX Acc No: N02-371255

Computer readable medium has files which are merged into single data representation and converting merged files into logically separate links

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: BOLOSKY W J; CUTSHALL S M; DOUCEUR J R Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 6389433 B1 20020514 US 99354660 A 19990716 200250 B

Priority Applications (No Type Date): US 99354660 A 19990716

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6389433 B1 34 G06F-012/00

Abstract (Basic): US 6389433 B1

NOVELTY - The computer readable medium has two files comprising duplicate data which are merged into a single data representation. Each merged file is converted into separate logical links that represent original file so as to provide access to the single data representation. The storage space which is occupied by the duplicate data of the files, is reclaimed.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a file

identification method.

USE - Used with hand-held devices, multiprocessor systems, microprocessor-based or programmable consumer electronics, network PCs, minicomputers, mainframes, etc.

ADVANTAGE - Since the files are merged into a single instance of data, accessing time is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram representing various components connected to a groveler worker object. pp; 34 DwgNo 4/19

Title Terms: COMPUTER; READ; MEDIUM; FILE; MERGE; SINGLE; DATA; REPRESENT; CONVERT; MERGE; FILE; LOGIC; SEPARATE; LINK

Derwent Class: T01

International Patent Class (Main): G06F-012/00

File Segment: EPI

#### 23/5/3 (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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014017753 \*\*Image available\*\*
WPI Acc No: 2001-501967/200155

XRPX Acc No: N01-372262

Files backing up method in distributed computing system, involves transmitting requested file from file server to backup server program to store file in storage device

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: ANGLIN M J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 6260069 B1 20010710 US 9821499 A 19980210 200155 B

Priority Applications (No Type Date): US 9821499 A 19980210

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes US 6260069 B1 10 G06F-015/16

Abstract (Basic): US 6260069 B1

NOVELTY - A backup request is initiated with a backup client program (14) to backup a requested file. The backup request is

transmitted by client program to a backup server program (16) upon determining that requested file is maintained in the shared name space. A message is transmitted by the server program to the file server (8) to provide the requested file. The requested file is transmitted to the server program and not to client program for storing the requested file in a storage device (18).

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for

distributed computing system.

USE - For backing up files on distributed computing system (claimed) communicating via network such as LAN, WAN, ethernet, SNA networks, token ring, local talk, TCP/IP, internet, etc.

ADVANTAGE - As the backup server program handles requests by a client computer to backup files maintained in the file server on the storage device managed by the server program, the network traffic is reduced throughout the distributed computing environment. Since the requested file is transmitted to the backup server program instead of transmitting to backup client program, the usage of network resources by client is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram illustrating software and hardware environment of the file backing up

method.

File server (8)

Backup client program (14)

Backup server program (16)

Storage devices (18)

pp; 10 DwgNo 1/3

Title Terms: FILE; BACKING; UP; METHOD; DISTRIBUTE; COMPUTATION; SYSTEM; TRANSMIT; REQUEST; FILE; FILE; SERVE; SERVE; PROGRAM; STORAGE; FILE;

STORAGE ; DEVICE
Derwent Class: T01

International Patent Class (Main): G06F-015/16

International Patent Class (Additional): G06F-015/73

File Segment: EPI

#### 23/5/4 (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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013133543 \*\*Image available\*\*
WPI Acc No: 2000-305414/200027

XRPX Acc No: N00-228339

Computer implemented method for determining files stored in namespace which will be selected for processing when namespace is accessed by user

Patent Assignee: HEWLETT-PACKARD CO (HEWP )

Inventor: SCHWOLS K

Number of Countries: 026 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week EP 99108470 19990430 EP 992898 20000412 A1 Α 200027 JP 99256258 JP 2000099381 A 20000407 19990909 Α 200028

Priority Applications (No Type Date): US 98157887 A 19980921

Patent Details:

Patent No Kind Lan Pq Main IPC Filing Notes

EP 992898 A1 E 14 G06F-009/44

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
JP 2000099381 A 9 G06F-012/00

Abstract (Basic): EP 992898 A1

NOVELTY - A computer application is created on a removeable media drive, and files associated with and created by the application that are stored on the removeable drive are selected for display to a computer monitor. When the drive is accessed, the method further filters out non-user relevant files and displays only those files that

a user can access.

DETAILED DESCRIPTION - The computer implemented method involves selecting files for display to a computer monitor using namespace extensions. An initiation file (200) is stored in a root directory (208,214) of the namespace, and contains s unique class ID that is used to access a registry key in the computer registry of the hard drive. The registry key accesses a dynamic link library, which is loaded into memory where its code is made available for execution. An executable object of the dynamic-link library contains the interfaces and methods (500,508,538,534,524.512,510,520,548,506,504) to read and select files for processing is loaded and executed. The files are then displayed to a computer monitor. INDEPENDENT CLAIMS are also included for; a computer readable, removable media for carrying out the method; an apparatus for determining which files stored in a namespace will be selected for processing when the namespace is accessed by a user.

USE - Selecting files read from a computer readable drive for display to a computer monitor.

ADVANTAGE - Prevents users from over-riding system properties, and provides software developers with the flexibility to use custom file extensions.

DESCRIPTION OF DRAWING(S) - The drawing shows a dynamic link library, its interfaces and methods.

CreateInstance method (500)

AddRef method (504)

Query interface method (506)

pp; 14 DwgNo 5/5

Title Terms: COMPUTER; IMPLEMENT; METHOD; **DETERMINE**; FILE; **STORAGE**; SELECT; PROCESS; ACCESS; USER

Derwent Class: T01

International Patent Class (Main): G06F-009/44; G06F-012/00

International Patent Class (Additional): G06F-009/445

File Segment: EPI

## 23/5/5 (Item 5 from file: 350) DIALOG(R)File 350:Derwent WPIX

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011361013 \*\*Image available\*\*
WPI Acc No: 1997-338920/199731

XRPX Acc No: N97-281152

Optical disk device - has light source drive circuit which controls output of laser light source to optimum value based on detected lens position signal and disc tilt signal

Patent Assignee: RICOH KK (RICO )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 9138962 A 19970527 JP 95293059 A 19951110 199731 B

Priority Applications (No Type Date): JP 95293059 A 19951110

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 9138962 A 7

Abstract (Basic): JP 9138962 A

The device has a focusing lens (6) which focuses the laser beam coming from a laser light source (1) to a selected area of an optical disk (7). A lens position sensor (18) detects the position of the lens and feeds the result to a drive control circuit (15) which determines an optimum laser power based on lens position.

A signal detection system detects the signal reflected by the optical disk and sums up the signal of each disc track with the signal between disc tracks. The sum signal is fed to a differential amplifier (13E) together with the lens position signal to come up with a disc tilt signal used by another drive control circuit (16) to determine an optimum laser power based on disc tilt. A light source

drive circuit (17) controls the output of laser light source to optimum value based on the output of the drive control circuits.

ADVANTAGE - Reduces cost since tilt sensor and lens position sensor are unnecessary. Provides normal recording since reduced recording capacity due to disc tilt is corrected.

Dwg.1/8

Title Terms: OPTICAL; DISC; DEVICE; LIGHT; SOURCE; DRIVE; CIRCUIT; CONTROL; OUTPUT; LASER; LIGHT; SOURCE; OPTIMUM; VALUE; BASED; DETECT; LENS; POSITION; SIGNAL; DISC; TILT; SIGNAL

Derwent Class: T03; W04

International Patent Class (Main): G11B-007/095

International Patent Class (Additional): G11B-007/125

File Segment: EPI

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DIALOG(R) File 350: Derwent WPIX

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WPI Acc No: 1996-083235/199609
XRPX Acc No: N96-069610

Automatic file extension device for multiple disk device - has input and output processing part which performs input and output processing of disk

Patent Assignee: NIPPON DENKI JOHO SERVICE KK (NIDE ) Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 7334398 A 19951222 JP 94131734 A 19940614 199609 B

Priority Applications (No Type Date): JP 94131734 A 19940614

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes JP 7334398 A 6 G06F-012/00

Abstract (Basic): JP 7334398 A

The file extension device has a file processor (21) managing the data storing state in a file. A use situation manager (22) manages the file use domain in the disk device. During file extension generation, a file exists in the disk device. When a domain for the existing film is not secured, the situation of other disk devices is investigated and the biggest disk device is determined. Then, the copy domain of the existing file is judged.

If the copy domain is securable, a file securing domain judgment part (25) secures an existing film copy domain with biggest empty domain. Using an extended file renewal part (23), the empty domain reserves the extended file domain and performs updating to the biggest disk device. The existing file domain is copied in an existing file copy domain. Then, an existing file domain copy part (24) opens the existing file domain. An input and output processing part (3) performs input and output processing of the disk device.

ADVANTAGE - Prevents continuation of file in two or more disks. Improves processing efficiency.

Dwg.1/7

Title Terms: AUTOMATIC; FILE; EXTEND; DEVICE; MULTIPLE; DISC; DEVICE; INPUT; OUTPUT; PROCESS; PART; PERFORMANCE; INPUT; OUTPUT; PROCESS; DISC; DEVICE

Derwent Class: T01; T03

International Patent Class (Main): G06F-012/00

International Patent Class (Additional): G06F-003/06

File Segment: EPI